

IN THE CLAIMS

Please amend claims 16-18. and 23-24. This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-15 (withdrawn)

Claim 16. (currently amended) A method for increasing a selectivity of a photoresist, comprising:

providing a substrate with a developed silicon-containing photoresist layer disposed over a non-silicon containing photoresist layer, the developed silicon-containing photoresist layer including polymer chains containing silicon;

exposing the substrate and the developed photoresist layer to an ultraviolet (UV) light, the UV light emanating from a UV generating agent;

converting a top portion of the developed silicon-containing photoresist layer to a hardened layer, the hardened layer being created by cross-linking the polymer chains containing silicon, the cross-linking being activated by the UV light; and

performing an etch using the hardened layer.

Claim 17. (currently amended) The method as recited in claim 16, wherein the polymer chains are cross-linked through one of silicon-hydrogen bonds and silicon-~~acetyl~~ CH₃ bonds.

Claim 18. (currently amended) The method as recited in claim 16, wherein the method operation of providing a substrate with a developed silicon-containing photoresist layer disposed over a non-silicon containing photoresist layer further includes,

placing the substrate in an etch chamber.

Claim 19. (original) The method as recited in claim 18, wherein the exposing the substrate further includes,

controlling the flow rate of an inert gas to the chamber between about 1000 sccm and about 3000 sccm.

Claim 20. (original) The method as recited in claim 19, wherein the inert gas is argon.

Claim 21. (original) The method as recited in claim 20, wherein the UV generating agent is neon.

Claim 22. (original) The method as recited in claim 21, wherein the flow rate of the neon is between about 0.2% and about 0.8% of the flow rate of the argon.

Claim 23. (currently amended) The method as recited in claim 21, wherein the method operation of exposing the substrate further includes,

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~~controlling the pressure of the chamber between about 50 mT and about 300 mT~~
striking a plasma composed of argon gas and neon gas.

Claim 24. (currently amended) The method as recited in claim 16 ~~17~~, wherein
the top portion of the developed silicon containing photoresist layer converted to the
hardened layer is between about 5% and about 75% of the developed silicon containing
photoresist layer.

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Cont.

Claims 25-36 (withdrawn)
